

Chapter 5 Review Question

Suppose a farmer is deciding how many acres to spray. The crop duster charges \$7 per acre. The total benefit of spraying is given in the following chart:

No. of Acres Sprayed	Total Benefit	Marginal Benefit	Total Cost	Marginal Cost	Net Gain
0	\$0				
1	12				
2	22				
3	30				
4	37				
5	42				

1. Fill in the remaining columns of the chart.
2. Use Method I to determine how many acres the farmer should spray.
3. Use Method II to determine how many acres the farmer should spray.
4. If the crop duster adds a fixed fee of \$5 to come out to the farm, how many acres should the farmer spray? Predict the answer without creating a new chart. Then create a new chart to verify your prediction.
5. If the crop duster raises his fee to \$10 per acre, how many acres should the farmer spray?
6. Given the answers above, how do the following impact the output decision for a firm.
 - a. A change in variable costs
 - b. A change in fixed costs
 - c. A change in the demand for the firm's product
 - d. A competitor leaving the industry